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Abstract

This article analyzes the economics of Corporate Social Responsible behaviors, namely the voluntary integration of environmental, social and governance factors in firms' strategy. We review theoretical and empirical literature and provide a unified framework of the forces driving corporate social responsibility, relying on three categories of market imperfections: the existence of externalities and public good; consumer heterogeneity; and imperfects contracts. The impacts of corporate social responsibility on corporate performance and society are also surveyed and the lack of knowledge on the latter leads to a research agenda.

Keywords: Corporate Social Responsibility; Business Sustainability; Environmental, Social and Governance Criteria; Firm Strategy.
JEL Codes: M14, L20, Q01.

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1 Introduction

Corporate social responsibility (CSR) has gained considerable attention over the past two decades and firms now increasingly struggle to become, or at least to appear as socially responsible. In 2010 almost two thirds of the biggest firms in industrialized countries have published a report on CSR or on sustainable development policies (KPMG, 2011). At the same time, a considerable attention in the literature has been given to the determinants of CSR and its impact on firm performance, especially in the field of management sciences and economics of organizations.

Being socially responsible means that, beyond legal constraints, firms take responsibility for their impacts on society. A prerequisite is the respect for applicable legislation and collective agreements between social partners. Further on, socially responsible enterprises should integrate social, environmental, ethical, human rights and consumer concerns into their business operations and core strategy with the double aim of maximizing the creation of shared value for their shareholders, stakeholders and society; and identifying, preventing and mitigating their possible adverse impacts (European Commission, 2011). This official definition hides in practice a wide range of socially responsible behaviors that may be clustered into three wide domains with the purpose of practicality: environmental, social and governance (ESG) factors.

The Environmental component refers to the incorporation into the design, manufacturing and distribution of products of environmental considerations such as pollution prevention and control; protection of water resources; biodiversity conservation; waste management; management of local pollution; or management of environmental impacts from transportation. The Social component refers to proactive human resources management (training and career development, employee participation, quality of working conditions) and may include as well contributions to local and general interest causes, respect for the human rights and elimination of child labor. Lastly, the Governance component refers to the firms' practices towards shareholders (respect for their rights, promotion of independent and competent administrators and auditors, transparency of key executive compensation) and can be extended to business behaviors towards customers and suppliers (prevention of conflicts of interest, corruption or anti-competitive practices; product safety; information to consumers; integration of CSR in the supply chain).

Whereas the concept of CSR rather aligns with sustainable development aspirations, the question of why would firms engage in CSR and its actual impact is far from trivial. For Friedman (1970) indeed, the sole responsibility of businesses is to increase profits. Corporations should not substitute for elected government to provide public goods and spend shareholders' money for 'doing good' without benefiting from the required political legitimacy. Yet, as highlighted by Bénabou and Tirole (2010), CSR represents a response to market and redistributive imperfections because of government failures or in order to promote values that are not shared by law makers.

In this article, we present a survey of the theoretical and empirical literature on the determinants and consequences of CSR using an economic lens. This economic perspective enables us to provide a unified framework of the forces driving CSR. In turn, CSR may arise from three categories of market imperfections, which structure our review. For each motive, theoretical arguments and their empirical test are surveyed.

Section **??** tackles a first source of market failures, which is the existence of externalities and public good. Governments may provide such goods or correct such externalities at the optimal level only in the case of perfect information. Otherwise, privately providing public goods or internalising externalities may occur under the pressure of the regulator, activists such as NGOs, or altruistic actors. Section **??** develops the CSR literature anchored in a second source of market imperfections that lies in consumer heterogeneity, generating product differentiation and market competition strategies. Section **??** presents imperfects contracts as a third source of market failure that motivates CSR as the delegated responsibility of shareholders, employees or firm managers in the presence of contract incompleteness. We also present in section **??** the literature main conclusions on the impact of CSR on firms competitiveness and performance on the one hand, and on society as a whole on the other hand, hereby highlighting the lack of knowledge on the latter. Future research paths are therefore suggested.

2 CSR, Externality Internalisation and Public Good Provision

Most CSR activities, based in particular on environmental and social factors, aim at reducing negative externalities (e.g. pollution abatement) or generating positive externalities and privately providing public goods (e.g. financing hospitals). We present in this section three types of motivations for such private provision of public goods: deterring public regulations or public politics, responding to social pressure or private politics, or exerting one's own moral duty to undertake social activities.

2.1 CSR, Public Politics and Regulation Preemption

A first determinant of firms' responsible behaviors arises from the regulator action. The threat of fines, new regulation compliance and other regulatory costs may induce higher CSR activities, but CSR may also be a response to government failure. Friedman (1970)'s view on CSR, according to which spending someone else's money for a general social interest amounts to taxes and proceeds squandering for "social" purpose without political legitimacy, in fact vanishes when either government fails or wishes not to crowd-out private provision of public goods. So do CSR activities actually substitute for or complement public regulations in terms of public good provision, in particular when government fails?

On the one hand, CSR may substitute to the regulation when it preempts it. Lutz et al. (2000) propose a duopoly model of vertical product differentiation in which a minimum quality standard increases welfare but negatively impacts industry profits because reduced quality differentiation intensifies price competition. Thus to reduce regulatory costs, firms seek to preempt regulations before their promulgation, inducing the regulator to weaken its standards: welfare falls but profits increase. In the context of "corporate environmentalism", Maxwell et al. (2000) identify conditions under which firms can profitably preempt regulatory threats and find that preemption occurs when industry organizing and lobbying costs are high. Empirical tests of the preemption theory are often based on case studies (see Arjalies and Ponssard, 2010). Focusing on the metal-finishing industry, Brouhle et al. (2009) econometrically evaluate the respective influence on carbon emissions of a voluntary program and of the threat of formal regulation. Participation in the program and significant emission reductions were shown to be related to several forms of external pressure, including the regulatory threat.

On the other hand, Maxwell and Decker (2006) note that many environmental investments seem to be aimed at reducing the costs of complying with *existing* regulations, thereby suggesting that firm's environmental performance and regulation are complements rather than substitutes. Here the regulator acts as an enforcer of existing environmental regulations and responds to voluntary environmental investments by reducing the frequency with which it monitors the firm. The firm is motivated to take action because of the reduction of its expected fine. Sam and Innes (2008) empirically support this reinforcement theory by showing that participation in a toxic waste reduction program (US 33/50) was motivated by the expectation of relaxed regulatory scrutiny. Using data on approximately 4000 facilities in seven OECD countries, Johnstone and Labonne (2009) provide strong evidence that environmental certification serves as a signal to regulatory authorities.

Beyond reinforcement theory, CSR might also complement regulations in cases of government failures, which have multiple origins (Bénabou and Tirole, 2010): capture by lobbies and other interest groups; territoriality of jurisdiction (as for child labor for instance); a combination of inefficiency, high transaction costs, poor information and high delivery costs. For instance, the regulator may share the desire to reduce costs of regulation and thus be willing to negotiate voluntary agreements (Lyon and Maxwell, 2008).

2.2 CSR as a Response to Social Pressure and Private Politics

The integration of negative corporate externalities could also be directly demanded by citizens and social activists. Hence a major determinant of CSR activities would be to respond to social pressure or deter private politics. As emphasized by Van den Berghe and Louche (2005) “companies are facing a new invisible hand, that is non-market forces exerted by NGOs, media trade-union and others, and influenced by this new invisible hand, they start to consider CSR as prerequisite for sustainable growth and welfare”. In turn, when CSR activities consist in private social redistribution and partial internalization of firm externalities, our society might consider the activity and use of public goods by less responsible firms as socially unfair and thus withdraw its “license to operate” (Post et al. 2002). When does a corporation become contestable and how can CSR mitigate contestability? How do social activists exert pressure on firms? Why are some firms targeted and others not?

According to the theory of contestability, anticipated threats of social protest can effectively discipline firm’s behavior. Hommel and Godard (2001, 2002) consider that a firm’s contestability is characterized by its exposure to two types of threats: contestation of its social license to produce and innovate, based on environmental or health-related risks to the community attributed to the firm’s products or processes; and economic contestation from competitors. Hence for a corporate activity to become contestable, firms need for instance to either be innovators or belong to notoriously dirty industries, and be significant actors on their market. The link between firm visibility on its market and CSR level has been found in many empirical studies (e.g. Margolis and Walsh, 2001). As such, CSR can be a strategic policy to prevent social contestability and protects the firm long term interests (Hommel and Godard, 2001).

Most often, social pressure is not directly exerted by citizens but rather by social activists, such as Non Governmental Organizations (NGOs). Defined by Baron (2001) as “private politics” actors, NGOs make direct demands on corporations enforced either by threats (boycott, negative propaganda) or rewards (endorsements), without reliance on public institutions or shareholders. Baron and Dirmeier (2007) highlight that the former is likelier than the latter, threats being more likely to decrease the level of the targeted activity. NGOs campaigns are a powerful lever of social pressure designed to negatively impact sales, employee morale and corporate recruitment efforts. Moreover, Sinclair-Desgagnï¿½ and Gozlan (2003) theoretically show that when NGOs wield big threat, it can induce “green” firms to distinguish themselves by issuing a detailed CSR report; whereas if weak, they release only moderately informed CSR reports as other firms do. Based on signaling theory, Feddersen and Gilligan (2001) also point out that information-supplying activist on a market for credence goods can alter the decisions of firms and consumers and enhance the social welfare of market exchange. Focusing on facilities reporting to toxic release inventory from 1988 to 1994, Sam and Innes (2008) find empirical evidence that participation in voluntary programs and pollutant reductions were prompted by a firm’s likelihood of becoming a boycott target.

However, not all contestable firms become the target of social activists. Visibility is increased by the extent of the public contact, as in consumer-oriented industries (Margolis and Walsh, 2001) or notoriously dirty industries (Brown et al., 2006). Siegel and Vitaliano (2007) add that firms selling experience (e.g. a book) or credence goods (e.g. fair-trade tea) are more likely to be socially responsible than firms selling search goods (e.g. a plane ticket). In sum, in this literature, social pressure appears as a major driver of CSR for large, consumer-oriented or notorious firms which commit to it in order to protect their license-to-operate. Nevertheless, NGOs do not necessarily target firms with highest levels of negative externalities. Baron and Dirmeier (2007) indeed develop a theory of adversarial NGOs campaigns displaying that NGOs prefer to target sequentially one firm rather than multiple firms simultaneously, pick up issues with high social values, and finally target firms more likely to be responsive to the campaign. Baron (2009) also highlight that if citizens do not distinguish between morally motivated CSR and CSR induced by social pressure, the activist is more likely to target the softer, morally motivated firm. In other words, this "soft firms" hypothesis states that social activists may in fact target their campaign against morally-managed firms because they have more to lose from the campaign than do self-interested firms. Empirically support is brought by Baron et al. (2008) on a large sample of firms over the 1996-2004 period.

2.3 CSR, Altruism and Pro-social Behaviors

Finally, recent developments in psychology and behavioral economics can be used to examine CSR as a behavior of 'sacrificing profits in the social interest' (e.g. Bénabou and Tirole 2010). In this interpretation, CSR is a pro-social behavior which reflects the managersẃillingness to engage in philanthropic activities, provide public good and internalize the negative externalities of their corporations. Typically this corresponds to Milton Friedman's view that CSR amounts to spending others' money for individual pro-social motivations.

Economic agents may want to promote values that are not shared by law-makers. Because preferences are heterogeneous, it is inevitable that some managersv́alues will not be fully reflected in policy and projected onto their corporate decisions. Pro-social behaviors result from several interacting motivations, from intrinsic (genuine) altruism to extrinsic (material) motivation, social and self-esteem concerns (Bénabou and Tirole, 2010). Image concerns may hence act as a cheap incentive device to induce responsible behaviors. For Baron (2010) as well, CSR may be viewed as self-regulation motivated by moral concerns. More precisely, he characterizes the scope of self-regulation as a function of the form and strength of moral preferences and analyzes how free-riding problems may be mitigated in this context. Empirically, tests of managers' pro-social behaviors most often merge with tests of the agency theory in which CSR is considered as a management perquisite (Baron et al., 2008; Brown et al., 2006).

Yet, pro-social motivation may also be subject to offsetting effects. Searching out excessive social prestige may crowd out the incentive provided by publicity on pro-social behaviors. The more advertised CSR activities are, the more they might be discounted as mere image-seeking rather than altruism. In this line, Bénabou and Tirole (2006) develop a theory of pro-social behavior that combines heterogeneity in individual altruism and greed with concerns for social reputation or self-respect.

Moreover, 'buying' social prestige with CSR may even be a zero-sum game. For instance, the buyer of a hybrid car feels and looks better, but makes his neighbors (both buyers and non-buyers of hybrid cars) feel and look worse (Bénabou and Tirole, 2010). From a public policy perspective, pro-social behaviors stemming from image concerns imply another externality. In fact, the image value 'bought' by a responsible firm increases the private individual return of the firm and partly reduces the negative social externality costs to be corrected. Hence, CSR motivated by altruism or pro-social behaviors may substitute partly to publicly provided public goods.

Finally, individuals can express their moral concerns about the ethical behavior of companies by means of ethical buying or ethical consumption. How firms can strategically exploit this consumer preference anchored in pro-social behavior is the focus of next section.

3 Strategic CSR, Market Competition and Differentiation

The second category of CSR behavior determinants lies in product market structure and competition. In a world populated by heterogeneous consumers including 'green' actors, a sub-set of producers can be expected to take voluntary steps to improve their environmental or social performance in order to obtain a label and extract a green premium. Basically, firms competing in imperfect markets may, and often do, over-comply with existing laws, thereby developing CSR activities (Reinhardt and Stavins, 2010). We successively consider product differentiation generated by consumers' heterogeneity, subsequent market competition, and their misuse under the form of green-washing.

3.1 CSR and and Product Differentiation

If a firm can identify customers willing to pay for ethical goods and if it can defend the resultant niche against imitators, business strategy in this context is like any other form of product differentiation, with the same basic economics (Reinhardt and Stavins, 2010): the opportunity arises because of asymmetric information, economies of scale, and intellectual-property protection.

A large number of articles consider CSR as a product differentiation strategy, with firms privately producing public goods to attract ethically oriented consumers. Arora and Gangopadhyay (1995) propose a standard model of vertical product differentiation to capture consumer heterogeneity in willingness-to-pay for environmental attributes. More recently, Besley and Ghatak (2007) examine the optimal level of CSR provision in a competitive market equilibrium where CSR corresponds to the creation of public goods and curtailment of public bads jointly with the production of private goods, and firms compete for “ethical” and neutral consumers. They show that in equilibrium, firms sell both ethical and neutral brands, consumers self-select according to their valuation of the public good, and CSR creates a Pareto improvement (see also Baron, 2007; Becchetti et al., 2005; Graff Zivin and Small, 2007).

Empirically, opinion polls indeed tend to report an increasing concern for ethical consumption (De Pelsmacker et al., 2005). For instance, 46% European consumers claim to be willing to pay substantially more for ethical products (MORI, 2000). Consumer willingness to pay appears asymmetric between sinners and saints products (the former inducing stronger reactions) and dependent on the CSR issue tackled, product quality and individual factors (Sen and Bhattacharya, 2001). In the food sector, Giraud-Hï¿½raud and Hoffman (2010) point out how consumers might be willing to have safe and healthy food but are having difficulties to practically pay for it. Loureiro and Lotade (2005) also reveal using a face-to-face survey that consumers are willing to pay higher premiums for fair trade and shade grown coffee labels than for organic coffee.

From this perspective, labels and certification play a core role in product differentiation strategies to reduce information asymmetry. Indeed, Darby and Karni (1973) point out that when consumers cannot observe the quality of a firm product, there are strong incentives for opportunistic behavior, and the resulting equilibrium does not maximize social welfare. Credence qualities are those which cannot be evaluated in normal use, as is the case of CSR, and therefore needs additional costly information for consumers to believe in it. Labels can be provided by social activists, as in the signaling model of Feddersen and Gilligan (2001). For Baron (2010), various types of organizations providing insurance (certification) and information (social labels) on CSR have different impacts on free-riding. Social labels allow individuals with stronger moral preferences to separate from those with weaker moral preferences, but are not able to expand the scope of self-regulation beyond that with unconditional altruism. Certifications can do so and attract individuals with both stronger and weaker moral preferences. Illustrating this effect, Bjorner et al. (2004) followed a large panel of Danish consumers over 1997-2001 and quantified at +13-18% the price premium for certified (the Nordic Swan) toilet paper.

3.2 CSR and Market Competition

Product Market competition represents another, yet non trivial, consequence of actors heterogeneity on CSR. We analyze in turn CSR determinants pertaining to competition intensity, reduction of production costs, entry barriers, and market opening thanks to innovation.

Comparing examples of censured activities, Shleifer (2004) identifies that, when unethical behavior cuts costs, competition drives down prices and entrepreneur incomes, thereby reducing their willingness to pay for ethical conduct. Thus unethical corporate behavior might arise from competition rather than pure greed. However, when firms compete for socially responsible consumers by linking the provision of a public good to sales of their private goods, social activities can become a by-product of product-market competition. Bagnoli and Watts (2003) hence theoretically show that the level of private provision of public good varies inversely with the competitiveness of the private-good market. Empirical support of this prediction is brought in Fernandez-Kranz and Santalo (2010)'s explicit test of the link between product market competition and CSR. They find that market concentration appears negatively related to environmental and social ratings and that increased competition due to higher import penetration leads to superior CSR performance. In the same line, Hull and Rothenberg (2008) also show that CSR most strongly affects performance in low-innovation firms and in industries with little differentiation.

Reducing production costs to increase profitability is another rationale of market pressure. The famous Porter's hypothesis (Porter and Van der Linde, 1995) upholds that increased input / output efficiency leads to competitive advantage. Widely investigated, empirical evidence on Porter's hypothesis still appears mixed. Margolis et al. (2009)'s meta-analysis concludes on a positive link between corporate environmental policies and profitability, driven by studies such as Derwall et al. (2005) that focuses on eco-efficiency. Nevertheless, recent works jointly taking into account multiple dimensions of CSR (environment, human resources, community involvements, etc.) contradict those findings (Barnett and Salomon, 2006; Brammer et al., 2006). More directly, Cerin (2006) heavily puts into question the theoretical fundamentals of the Porter's hypothesis.

A related determinant of CSR activities lies in raising entry barriers and competitors' costs. Enforced social or environmental corporate policies can raise regulatory barriers for firm competitors. An insightful path is opened by Chambolle and Giraud-Hï¿½raud (2005) who formalize product certification as a non-tariff barrier. By reducing competition intensity on the protected market, CSR entrance barriers can increase firm profitability. An illustration is recounted in Lyon and Maxwell (2008): the Florverde Program would have enabled the European cut flower market suppliers to be chosen based on pesticides use, thus inducing Columbian producers to promote environmentally friendly practices. However, empirical evidence beyond specific case studies is scarce in the literature.

The last element of competition related to CSR is innovation, which has been the focus of several empirical papers. Lanoie et al. (2011) use data on 4200 facilities in seven OECD countries and find strong support for environmental regulation stimulating environmental innovations. Wagner (2008) also find that environmental management systems are associated with process innovation, while product innovation are more induced by information to consumers and eco-labelling. Based on survey data, Demirel and Kesidou (2011) show that eco-innovation (such as end of pipeline technologies, integrated cleaner production) is driven by the need for increased efficiency; whereas environmental regulation stimulates end of pipeline technologies and environmental research and development. Market innovation can also take social forms, as in the Bottom-of-the-Pyramid strategies. For instance, Murphy et al. (2012) highlight how firms can invest in social issues to prepare new market opportunities in emerging countries.

3.3 Reputation and Greenwashing

Whereas ethical consumption and agents' heterogeneity can ground product differentiation and strategic market competition, the credence good property of CSR makes it very dependent on information asymmetry and increases the risk of free-riding. However, free riding on CSR can turn out to be highly damageable for firm reputation.

As an increasing number of firms nowadays make a lot of effort to appear as socially responsible, many of them are criticized for being "greenwashers". Greenwashing is a term generally used when significantly more money or time has been spent advertising being green (that is, operating with consideration for the environment), rather than spending resources on environmentally sound practices. Greenwashing in a sense echoes Bénabou and Tirole (2006)'s theory of pro-social behavior that combines heterogeneity in individual altruism and greed with concerns for social reputation. Those authors show how doubt is thus created about the true motive for which good deeds are performed, which can lead to a reduction of social welfare (the reputation-stealing effect). As put by Walley and Whitehead (1994), "it is not easy being green". Indeed, if the consumer's willingness to pay for CSR is insufficient, ethical standard adhesion costs represent a competitive disadvantage. An illustration is provided by Bagnoli and Watts (2003) who show that if conventional products are highly competitive with low prices, fewer consumers wish to buy "green". Moreover, CSR being in essence a transparent activity, even if the early mover advantage does enhance profits, it soon erodes as competitive strategies copy it (Hoppe and Lehmann-Grube, 2001; McWilliams and Siegel, 2001). Beyond anecdotes, greenwashing has already been pinned down in a few empirical papers. In particular, Kim and Lyon (2008) compare voluntary disclosures of reductions of greenhouse gas emissions in the electric utility sector against actual emissions and demonstrate that, in the aggregate, the program had no effect on carbon intensity.

Yet protecting firm reputation is an important motive for CSR activities beyond greenwashing. Consumers' memory can indeed be long-lasting. Kotler and Lee (2005) hence develop a framework that explains why charitable activities are good for business from a marketing perspective. Portney (2008) highlights that the firms' belief that beyond compliance behavior will help curry favor with current and potential future customers is particularly true for firms in the food and consumer product businesses. Linking advertising, competition and CSR, Fisman et al. (2006) present a signaling model in which CSR may serve as a means of vertical differentiation in a market where quality is difficult to observe. Analyzing natural experiments on eBay where sellers offer identical products with and without charity donations, Elfenbein et al. (2012) observe behaviors in line with Fisman et al. (2006) predictions. Based on a sample of over 150,000 auctions, they observe that in the presence of little information about the reliability of a seller, charity commitments play a significant role in establishing trust. Also supporting Fisman et al. (2006)'s theoretical predictions, Brown et al. (2006) find that firms that advertise more intensively also give more to charity, while Hines and Ames (2000) report that 68% of interviewed consumers claimed to have bought a product or service because of a firm CSR reputation. CSR thus appears as a lever to build up firm reputation, considered as a strategic intangible asset.

4 CSR as Delegated Responsibility

The third category of market imperfections grounding CSR strategies is anchored in imperfect contracts. Indeed, responsibility of the firm might implicitly be extended by its majors stakeholders towards environmental, social and governance issues in the presence of contract incompleteness. This section hence surveys the literature on CSR considered as the delegated responsibility of successively firm shareholders, then firm employees and lastly firm managers.

4.1 CSR and Responsible Investors

Among all stakeholders, shareholders hold a major stand with full legitimacy to ask, in addition to fiduciary duties, the firm they own to engage in CSR. In a review of shareholder activism to promote CSR, Sjöström (2008) underlines that five key themes emerge in the literature: (i) shareholder proposals in the United States, including proposal topics and voting results; (ii) the effects of shareholder activism on corporate policy and practice; and shareholders activism by respectively: (iii) NGOs; (iv) unions and (v) pension funds. We here focus on the literature about shareholder delegated responsibility undertaken by socially responsible investors. We first present literature describing those investors and then their impacts on CSR.

In both Europe and the United States, about 1 dollar out of 9 is estimated to incorporate environmental, social and governance consideration in the investment decision process (Eurosif 2010; Social Investment Forum 2010). Consequently, the impact of socially responsible investors on firms' business strategies can be a very powerful determinant of CSR strategies. Chatterji et al. (2009) distinguish four motivations of social investors: financial (believing that CSR increases firm performance), deontological (not willing to profit from unethical or heinous actions), consequentialist (rewarding good behavior and providing incentive) and expressive (expressing personal identity to yourself or others). Delegated responsibility covers essentially those last three points. Investors are also highly aware of regulatory context and opportunities, as illustrated in Takeda and Tomozawa (2008) investigation of stock price reactions to the release of environmental management ranking (issued by a Nikkei newspaper) in Japan from 1998 to 2005. Their results indicate that market reactions were changed between 2001 and 2002, when the Japanese government showed its strong commitment to environmental policies.

From a theoretical perspective, the impact of responsible investors on CSR strategies relates to the abundant literature on the link between financial performance and CSR that will be detailed in section 5 (e.g. Cappelle-Blancard and Monjon, 2010). This literature focuses on the trade-off between different types of performance. One possibility is that environmental or social performance improves to the detriment of classical financial performance. Another possibility is that both types of performance are correlated, in the short run, or at least in the long run. One way to answer these issues is to analyze the impact of responsible practices on the cost of capital. Heinkel et al. (2001) demonstrate that 20% of social activists are needed in the market for it to impact firm's capital cost, which is empirically verified by Hong and Kacperczyk (2009). As highlighted by Lee (2008), the recent rise of the socially responsible investment movement had a significant impact on CSR.

Other types of studies provide insightful information on the link between socially responsible investments and performance. Modeling socially responsible investments as a composite commodity which combines a financial investment product with a charitable giving vehicle, Graff Zivin and Small (2007) show that rents are not necessarily lower in case of natural monopolies, niche markets, imperfect information, regulatory distortions, anti takeover laws and other market imperfections. Empirically, Van de Velde et al. (2005) display no performance difference between socially responsible and conventional funds when they control for style differences within the portfolio. Barnett and Salomon (2006) combine modern portfolio and stakeholder theories, and hypothesize that the financial loss born by a socially responsible fund due to poor diversification is offset as social screening intensifies because better-managed and more stable firms are selected into its portfolio. In view of those studies, socially responsible investment thus appears as an increasing and effective lever which can penalize firms with insufficient CSR, at least without harming investor profitability, likely improving it on the long run.

4.2 CSR and Employee Motivation

The second category of stakeholders whose responsibility can be delegated through CSR is the labour force. We first present the literature on the interactions of global CSR and employees, before focusing on proactive human resources policies.

As a starting point, CSR can appear as a signal for corporate culture. Brekke and Nyborg (2008) demonstrate in their model that "green" firms can recruit motivated employees with team work values and hereby secure firm survival and long-term performance. Based on propositions from social identity theory and signaling theory, Turban and Greening (1997) also highlight that CSR can attract good employees, while Albinger and Freeman (2000) empirically find that it only concerns highly qualified employees. High level of CSR can also reduce costly employee turnover

(Portney 2008). Moreover, motivated employees might be likely to accept lower wages than the fair market value because they are compensated through the knowledge that their work satisfies their personal values, as illustrated by Frank (1996) in an experiment on Cornell University graduates. Lanfranchi and Pekovic (2011) observe as well that employees working for "green" firms are significantly more likely to report a higher feeling of usefulness in their job and to describe themselves as fairly valued than other workers in France in 2006. Whereas those employees do not claim to be more actively involved in their job, they are nevertheless significantly more likely, ceteris paribus, to work uncompensated for supplementary work hours.

Proactive human resources policy in itself appears to increase firm performance through productivity. This positive link is found by Jones and Murrell (2001) on the stock returns of the 51 firms included in the Working Mother List; by Galbreath (2006) on employee treatment in Australia; or by Edmans (2010) on the stock returns of the 100 Best Companies to Work For in America. Analysis tackling joint CSR dimensions also find a positive link between the human resources dimension and financial performance (Barnett and Salomon, 2006; Brammer et al., 2006).

In sum, while socially responsible investment appears as an effective lever to penalize firms for insufficient CSR, proactive CSR can enhance employee productivity through various paths. Both are linked to what investors and potential future employees believe the firm true CSR level is. People beliefs and firm reputation are also deeply related to the level of pressure society exerts on companies.

4.3 CSR, Governance and the Managers-Shareholders Relationship

Finally, CSR can be the delegated responsibility of those who manage the firm: CEOs and boards of directors, the latter linking the former to shareholders. The whole purpose of governance is to organize the relationships and responsibilities between those three layers. A specific case is CEOs - owners, which we first detail, before surveying the literature on CSR and respectively firm managers and boards.

Regarding the role of CEOs in CSR strategies, founding and owning CEOs have all power to choose their firm's CSR level in line with their business model and personal objectives. Examples of such owners involve Yvon Chouinard, founder of the outdoor company Patagonia, or Frank Riboud, CEO of the food and water company Danone. Nevertheless, putting aside the large population of small and medium size enterprises, firms are seldom both owned and managed by the same people. Baron (2007) discusses a model of social entrepreneurship in which social entrepreneurs prefer to create CSR firms. For them and their shareholders, corporate giving is then a good substitute for personal giving.

When CEOs are neither owners nor backed up by philanthropic shareholders, according to Friedman (1970), their responsibility is then to ensure profitability. If CEOs embark firms on CSR, they might misappropriate shareholder funds for opportunistic reasons. Anchored in the agency theory, such a CSR could thus be a perquisite for managers who like the accolades of the advocates of broadened social performance (Baron et al., 2008). Bringing the argument a step forward, Cespa and Cestone (2007) build an entrenchment theory portraying CSR strategies as a way for inefficient managers to ensure stakeholders' support to reinforce their own position at the expense of the shareholders. However, company value and manager rotation increase when shareholders engage in an explicit protection of the stakeholders that does not go through the manager, hence depriving her of activists' support. Such a finding provides a rationale for the emergence of specialized institutions (social auditors and ethic indexes) that help firms commit to stakeholder protection even in the case of managerial replacement.

If the agency theory proves right, a twofold prediction should be empirically verified: first, CSR increases with slack resources and discretion available to management; second, the causality is orientated from firm performance to CSR. If Baron et al. (2008) indeed find that responsive corporate social performance increases with slack resources, few other studies successfully investigated yet the true causality (Margolis et al., 2009). Using a different approach, Reinhardt et al. (2008) suggest that the relationship between CSR and CEO compensation may be close to flat at some levels of firm performance, and that CEOs may trade off compensation against CSR activities. However this is not empirically verified by Frye et al. (2006) in their comparison of CEOs compensations of firms listed in the Domini Social Index with other firms in similar industries. Socially responsible firms nonetheless have a higher CEOs turnover when firm performance is bad, which put into question the entrenchment theory. Moreover, stock options grant does not increase CEOs risk taking behaviors in socially responsible firms as it does in conventional ones. Reinhardt et al. (2008) conclude that it might be anyway less costly for investors and shareholders to accept a degree of principal-agent slack than to eliminate it completely, because excessively constrained managers may be ineffective.

Yet, firm management does not only hold on its CEO, but also on its board of directors. The board's impact on CSR activities seems to have seldom been tackled both empirically and theoretically. Some empirical studies nonetheless display a link between CSR and governance, which raises questions about the link between governance and performance. Indeed, Brown et al. (2006) show that firms with larger boards of directors are associated with significantly more cash giving and with the establishment of corporate foundations, whereas Jo and Harjoto (2011) highlight that engagement in CSR in positively associated with board independence and institutional ownership. Gompers et al. (2003) support the hypothesis that well-governed companies outperform their poorly governed counterparts by about 8.5%. However, Core et al. (2006) challenge their results. Interestingly, Bauer et al. (2003) find substantial differences between the U.K. market and the Eurozone markets: the lower the governance standards, the stronger the relationship between governance and firm value.

5 CSR and performance

In previous sections, we identified and surveyed the major determinants of CSR. Understanding those drivers is core to analyze why and how firms would engage in CSR and how this engagement is likely to impact their activities. We now precisely focus on this impact by surveying the large literature investigating the link between CSR and firm performance, before discussing research on the actual impact of CSR on society to highlight how CSR can or not relate to sustainable development.

5.1 CSR and financial performance

The link between CSR and firm performance has triggered considerable academic work, as witnessed by the numerous surveys dedicated to this literature (e.g. Griffin and Mahon, 1997; Margolis and Walsh, 2003; Orlitzky et al., 2003; Portney, 2008; Scholtens, 2008; Van Beurden and Gossling, 2008). The active debate on whether this link actually exists can be considered as closed by the extensive meta-analysis conducted by Margolis et al. (2009) on 251 studies: "The effect of corporate social performance on corporate financial performance is small, positive and significant. Corporate social performance does not destroy shareholder value, even if its effect on the value is not large". However, many scholars still consider that much research is still needed to fully understand the drivers of this relationship, or, put differently, how firms succeed on both financial and social levels (Horváthová, 2010; Surroca et al., 2010).

Such research should avoid the numerous biases and problems of previous work that have been pointed out in the literature among which: omitted variables in the determinants of profitability (McWilliams and Siegel, 2000); model misspecification and endogeneity (Garcia-Castro et al., 2010); limited data (small samples, old periods; Horváthová, 2010); cross-sectional analysis invalid in the presence of significant firm heterogeneity (Elsayed and Paton, 2005); linearity assumptions (Barnett and Salomon, 2006); wide diversity of measures used to assess financial performance (Margolis and Walsh, 2003). Another problem also lies in the direction and mechanisms of causation. Whether CSR would lead (or not) to superior firm performance, or whether financial performance would rather be a necessary condition for CSR is a major stake to investigate (see Margolis et al., 2009). For instance, Wagner (2010) uses panel data to disentangle the effects of CSR, advertising and R&D over time. Problems of measurement of CSR have also been pointed out and are core to understand the potentiality of CSR as a sustainable development tool. For instance, Iwata and Okada (2011) consider the effect of two different environmental issues (waste and greenhouse gas emissions) on financial performance using panel data of Japanese manufacturing firms from 2004 to 2008 and show that the responses of financial performance are different depending on each environmental issues. Considering different measures of economic and financial performance, Delmas and Nairn-Birch (2010) also show that environmental performance (increasing carbon emissions) positively impacts financial performance when using accounting based measures (e.g. return on assets) but negatively affects market based measures of financial performance (e.g. Tobin's q).

The complex nature of CSR leads to another promising research path. Some recent works suggest that it should be a specific combination of firm policies that would likely lead to superior corporate performance. During the 1990s, this complementarity between different managerial practices has proven a useful explanation of the Solow paradox, whereby "you can see the computer age everywhere but in the productivity statistics" (Solow, 1987). Indeed, several researchers have shown that only those firms that have adopted both computerization and complementary innovative human resources management practices (teamwork, multi-tasking, quality circles, etc.) did enjoy superior performance (e.g. Ichniowski and Shaw, 2003). By analogy, the apparently ambiguous relationship between CSR and firm performance could presumably be explained by taking into account the complementarity between the multi-dimensional facets of CSR. Taking into account CSR as a multi-dimensional strategy is all the more important since, as pointed out by Bénabou and Tirole (2010), firms can do well on some dimensions and poorly on others. Such a research would renew the debate on the link between CSR and performance.

5.2 CSR and Extra Financial Performance

If CSR amounts to privately provided public goods, it is important to be able to evaluate its impact not only on economic and financial performance, but also on social performance. Lee (2008) and Abeysuriya et al. (2007) already called for more attention to the social side of the equation. The key question of whether firms can be efficient actors of sustainable development definitely needs to be tackled, all the more as it has drawn little attention in the CSR field. We first present the theoretical literature on CSR impact on welfare depending on its origin (public politics; private politics; product differentiation), before analyzing some empirical findings. We conclude by proposing research paths to extend the required toolbox for more comprehensive analysis.

Theoretical results on the impact of CSR on social welfare are mixed (Lyon and Maxwell, 2008), as CSR is not necessarily beneficial, depending very much on the context in which it occurs. For Besley and Ghatak (2007) who examine the optimal level of CSR provision, CSR can create a pareto improvement in equilibrium. Whereas CSR can be a less costly substitute for government mandates and hence increase welfare, it can also distort regulatory decisions in a way that lowers it. Maxwell and Decker (2006) found in their enforcement theory that, despite the fact that all agents in the model act voluntarily, their actions may lead to a suboptimal level of environmental investment. Fleckinger and Glachant (2011) demonstrate that the impact of self-regulation on social welfare depends on the set of policy instruments available to the regulator (mandatory regulation or voluntary agreements). For Lyon and Maxwell (2008), overall, the impact of preemptive CSR depends upon whether it is undertaken unilaterally or through a voluntary agreement with the regulator, and whether the regulator is welfare-maximizing or influenced by particular interest groups.

In terms of private politics, is social pressure from NGOS beneficial for the society as negative externalities are reduced? To answer this issue, Heyes and Maxwell (2004) compare the relative merits of two types of self regulation mechanisms: mandatory through an international organization setting a constraining (environmental or social) standard, and voluntary through an NGO operating labeling schemes. Their model shows that the level of industry resistance to the standard is greater when there exists an NGO than when there does not (voluntary labels being more attractive when defeating the international organization proposal). In turn, though the anticipation of industry resistance leads the international organization to decrease the stringency of its standard, the NGO may serve a 'back-stop' function and encourage more stringent international standard. Moreover, the authors show that when both the voluntary and mandatory scheme co-exist, the existence of NGOS increases welfare. However, by inducing firms to lobby against government standards, it is also possible that the existence of NGO labeling schemes can undermine government regulatory programs that would be of even greater value (Lyon and Maxwell, 2008).

CSR used as a pure market tool lacks studies on its actual impact on society. Intuitively, CSR certification might increase the sales of environmentally (e.g. recycled) or socially (e.g. fair trade) friendly products, thus increasing the utility of consumers who switch from conventional to green products. If green products substitute to conventional ones, as on a mature market with stable sales, social welfare might increase. However, if the market is expanding, the increasing overall sales might generate social damage. One can think for instance of the debate generated by green products whose global life-cycle analysis turn out to be more polluting than conventional products. Moreover, Faucheux and Nicolai (1998) argue that the state intervention is needed to avoid firm competition driven technological lock-ins. Applying the Coase theorem and thus bringing transactions costs and property rights to fore, Cerin (2006) also highlights that strong public support is necessary to create private incentives for exploring significant economic and environmental win-win innovations.

Empirical tests of those theoretical predictions are still scarce in the CSR literature, at least from the economics and management science perspective. An interesting example is the evaluation done by Brouhle et al. (2009) of two environmental policy levers (a voluntary program and the threat of formal regulation) on emissions in the metal-finishing industry. They find that participation in the voluntary program yielded little, if any, additional reductions in emissions. However, while participants do not appear to take advantage of the program initially, they make greater strides in reducing emissions than non-participants in later years. Another input is brought by Dam and Scholtens (2008) who demonstrate that firms with high level of CSR are less likely to relocalize their production in countries with weak environmental regulation (the pollution heaven hypothesis). However, little studies tackle the impacts of CSR on multiple aspects simultaneously, as conducted for instance in product life-cycle analysis.

From this perspective, the toolbox to evaluate CSR impact on society could likely benefit from the experience gathered in other fields. For instance, lessons from public policy analysis and development economics might be drawn and transferred to analyze the respective impact of various CSR policies on public welfare. Methodologies such as impact evaluation methods relying on experimental and quasi- experimental designs could also be insightful.

6 Conclusion

This paper proposes a comprehensive framework to analyze the economics determinants of CSR. We hence survey how CSR is driven by market imperfections such as corporate externalities, private provision of public goods, agents heterogeneity and imperfect contracts. Understanding the economics of CSR is core to take a step out of the long lasting debate of whether engaging in CSR generates profits for corporations and to provide research paths to follow in order to understand how can firms succeed on both financial and social levels. To do so, further research is precisely needed on the evaluation of the social impact of CSR.

In its 2009 report, the Global Environment Outlook of the United Nations Environmental Program stated that "efforts to slow the rate or extent of change [to the Earth system] including enhanced resource efficiency and mitigation measures have resulted in moderate successes but have not succeeded in reversing adverse environmental changes. Neither the scope of these nor their speed has abated in the past five years". It also highlights that "the lack of reliable and consistent time-series data on the state of the environment is a major barrier to increasing the effectiveness of policies and programs. (...) All countries should undertake to monitor and assess their own environment and integrate social, economic and environmental information to inform decision-making processes". No less can be said about CSR and corporations, as it has become core to evaluate whether CSR achieves its promises towards society.

References

[1] Abeysuriya, K., Mitchell, C., White, S., 2007. Can corporate social responsibility resolve the sanitation question in developing Asian countries? Ecological Economics 62(1), 174-183.

[2] Albinger, H.S., Freeman, S.J., 2000. Corporate social performance and attractiveness as an employer to different job seeking populations. Journal of Business Ethics 28(3), 243-253.

[3] Arjalies, D.A., Ponssard, J.P., 2010. A managerial perspective on the Porter Hypothesis: The case of CO2 emissions. In Corporate Social Responsibility: From Compliance to Opportunity?, P. Crifo, J. P. Ponssard (Eds), Editions de l'Ecole Polytechnique, 2010, 151-168.

[4] Arora, S., Gangopadhyay, S., 1995. Toward a theoretical model of voluntary overcompliance. Journal of Economic Behavior and Organization 28(3), 289-309.

[5] Bagnoli, M. Watts, S., 2003. Selling to socially responsible consumers: Competition and the private provision of public goods. Journal of Economics and Management Strategy 12(3) 419-445.

[6] Barnett, M.L., Salomon, R.M., 2006. Beyond dichotomy: The curvilinear relationship between social responsibility and financial performance. Strategic Management Journal 27(11), 1101-1156.

[7] Baron, D.P., 2001. Private politics, corporate social responsibility and integrated strategy. Journal of Economics and Management Strategy 10(1), 7-45.

[8] Baron, D.P., 2007. Corporate social responsibility and social entrepreneurship. Journal of Economics and Management Strategy 16(3), 683-717.

[9] Baron, D.P., 2009. A positive theory of moral management, social pressure, and corporate social performance. Journal of Economics and Management Strategy 18(1),7-43.

[10] Baron, D.P., 2010. Morally motivated self-regulation. American Economic Review 100(4), 1299-1329.

[11] Baron, D.P., Diermeier, D., 2007. Strategic activism and nonmarket strategy. Journal of Economics and Management Strategy 16(3), 599-634.

[12] Baron, D.P., Harjoto, M., Jo, H., 2008. The economics and politics of corporate social performance. Stanford graduate school of business Research paper 1993.

[13] Bauer, R., Guenster, N., Roger, O., 2003. Empirical evidence on corporate governance in Europe - The effect on stock returns, firm value and performance. Journal of Asset Management 5(2), 91-104.

[14] Becchetti, L., Giallonardo, L., Tessitore, E., 2005. The game of social responsibility: A product differentiation approach. Mimeo University Tor Vergata Roma.

[15] Bï¿½nabou, R., Tirole, J., 2006. Incentives and prosocial behavior. American Economic Review 96(5), 1652-1678.

[16] Bï¿½nabou, R., Tirole, J., 2010. Individual and corporate social responsibility. Economica 77 (305), 1-19.

[17] Besley, T., Ghatak, M., 2007. Retailing public goods: The economics of corporate social responsibility. Journal of Public Economics 91(9), 1645-1663.

[18] Bjorner, T.B., Hansen, LG., Russel, C., 2004. Environmental labeling and consumers choice. An empirical analysis of the effect of the Nordic Swan. Journal of Environmental Economics and Management 47(3), 411-434.

[19] Brammer, S., Brooks, S., Pavelin S., 2006. Corporate social performance and stock returns: UK evidence from disaggregate measures. Financial Management 35(3), 97-116.

[20] Brekke, K., Nyborg, K., 2008. Moral hazard and moral motivation: Corporate social responsibility as labor market screening. Resource and Energy Economics 30 (2008), 509-526.

[21] Brouhle, K., Griffiths, C., Wolverton, A., 2009. Evaluating the role of EPA policy levers: An examination of a voluntary program and regulatory threat in the metal-finishing industry. Journal of Environmental Economics and Management 57(2), 166-181.

[22] Brown, W. O., Hellanda, E., Smith, J. K., 2006. Corporate philanthropic practices. Journal of Corporate Finance 12(5), 855-877.

[23] Capelle-Blancard, G., Monjon, S., 2010. Socially responsible investing: myths and reality. Finance and Substainable Development, Seminar Lecture Notes, forthcoming.

[24] Cerin, P., 2006. Bringing economic opportunity into line with environmental influence: A discussion on the Coase theorem and the Porter and van der Linde hypothesis. Ecological Economics 56(2), 209-225.

[25] Cespa, G., Cestone, G., 2007. Corporate social responsibility and managerial entrenchment. Journal of Economic Management and Strategy 16(3), 741-771.

[26] Chambolle, C., Giraud-Hï¿½raud, E., 2005. Certification of origin as a non-tariff barrier. Review of International Economics 13(3), 461-471.

[27] Chatterji, A., Levine, D., Toffel, M., 2009. How well do social ratings actually measure corporate social responsibility? Journal of Economics and Management Strategy 18(1), 125-169.

[28] Core, J.E., Guay, W.R., Rusticus, T.O., 2006. Does weak governance cause weak stock returns? An examination of firm operating performance and investors' expectations. Journal of Finance 61(2), 655-687.

[29] Dam, L., Scholtens, B., 2008. Environmental regulation and MNEs location: Does CSR matter? Ecological Economics 67(1), 55-65.

[30] Darby, M.R., Karni, E., 1973. Free competition and the optimal amount of fraud. Journal of Law and Economics 16(1), 67-88.

[31] Delmas, M.A., Nairn-Birch, N.S., 2011. Is the tail wagging the dog? An empirical analysis of corporate carbon footprints and financial performance, UCLA Institute of the Environment and Sustainability Working Paper.

[32] Demirel, P., Kesidou, E., 2011. Stimulating different types of eco-innovation in the UK: Government policies and firm motivations. Ecological Economics 70(8), 1546-1557.

[33] De Pelsmacker, P., Driesen, L., Rayp G., 2005. Do consumers care about ethics? willingness to pay for fair-trade coffee. The Journal of Consumer Affairs 39(2), 363-385.

[34] Derwall, J., Gunster, N., Bauer, R., Koedijk, K., 2005. The eco-efficiency premium puzzle. Financial Analysts Journal 61(2), 51-63.

[35] Edmans, A., 2010. Does the stock market fully value intangibles? Employee satisfaction and equity prices. Journal of Financial Economics, forthcoming.

[36] Elfenbein, D.W., Fisman, R., McManus, B., 2012. Charity as a substitute for reputation: Evidence from an online marketplace. Review of Economic Studies (forthcoming).

[37] Elsayed, K., Paton, D., 2005. The impact of environmental performance on firm performance: Static and dynamic panel data evidence. Structural Change and Economic Dynamics 16(3), 395-412.

[38] European Commission, 2011. A renewed EU strategy 2011-14 for corporate social responsibility. Communication From the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Com. 681 final., 6.

[39] Eurosif, 2010. European SRI Study, Revised Edition, Eurosif Studies, Paris.

[40] Faucheux, S., Nicolai, I., 1998. Environmental technological change and governance in sustainable development policy. Ecological Economics 27(3), 243-256.

[41] Feddersen, T.J., Gilligan, T.W., 2001. Saints and markets: Activists and the supply of credence goods. Journal of Economics and Management Strategy 10(1), 149-171.

[42] Fernandez-Kranz, D., Santalo, J., 2010. When necessity becomes a virtue: The effect of product market competition on corporate social responsibility. Journal of Economics and Management Strategy 19(2), 453-487.

[43] Fisman, R., Heal, G., Nair, V.B., 2006. A model of corporate philanthropy. Working Paper, Wharton School, University of Pennsylvania. Available at http://knowledge.wharton.upenn.edu/papers/1331.pdf

[44] Fleckinger, P., Glachant, M., 2011. Negotiating a voluntary agreement when firms self-regulate. Journal of Environmental Economics and Management 62(1), 41-52.

[45] Frank, R., 1996. Can socially responsible firms survive in a competitive market? In Codes of Conduct: Behavioral Research into Business Ethics. David Messick and Ann Tenbrunsel, ed. New York, NY: Russel Sage Foundation, 214-227.

[46] Friedman, M., 1970. The social responsibility of business is to increase its profits. New York Times Magazine Sept. 13, 32-33.

[47] Frye, M.B., Nelling, E.F., Webb, E., 2006. Executive compensation in socially responsible firms. Corporate Governance: An International Review 14(5), 446-455.

[48] Galbreath, J., 2006. Does primary stakeholder management positively affect the bottom line?: Some evidence from Australia. Management Decision 44(8), 1106-1121.

[49] Garcia-Castro, R., Ariño, M.A., Canela, M.A., 2010. Does social performance really lead to financial performance? Accounting for endogeneity. Journal of Business Ethics 92(1), 107-112.

[50] Giraud-Hï¿½raud, E., Hoffman, R., 2010. Corporate social responsibility as a strategy for safe and healthy food. In Corporate Social Responsability : From Compliance to Opportunity ?, P. Crifo, J. P. Ponssard (Eds), Editions de l'Ecole Polytechnique, 2010, 151-168.

[51] Global Environment Outlook, 2012. Summary for policy makers. United Nations Environment Programme, Nairobi.

[52] Gompers, P., Ishii, J., Metrick, A., 2003. Corporate governance and equity prices. Quarterly Journal of Economics 118(1), 107-156.

[53] Graff Zivin, J., Small, A., 2007. A Modigliani-Miller theory of altruistic corporate social responsibility. The B.E. Journal of Economic Analysis and Policy 5(1). Available at: http://works.bepress.com/jgraffzivin/1

[54] Griffin, J.J., Mahon, J.F., 1997. The corporate social performance and corporate financial performance debate: Twenty five years of incomparable research. Business and Society 36(1), 5-31.

[55] Heinkel, R., Kraus, A., Zechner, J., 2001. The effect of green investment on corporate behavior. Journal of Financial and Quantitative Analysis 36(4), 431-449.

[56] Heyes, A., Maxwell, J., 2004. Private vs. public regulation: Political economy of the international environment. Journal of Environmental Economics and Management 48(2), 978-996.

[57] Hines, C., Ames, A., 2000. Ethical consumerism. A research study conducted for the co-operative bank by MORI. London: MORI.

[58] Hommel, T., Godard, O., 2001. Contestation sociale et stratégies de développement industriel. Application du modele de la Gestion Contestable á la production industrielle d'OGM. Working paper, Ecole Polytechnique 15.

[59] Hommel, T., Godard, O., 2002. Trajectoire de contestabilité et production dÓGM á usage agricole. Économie rurale 270, 36-49.

[60] Hong, H., Kacperczyk, M., 2009. The price of sin: The effects of social norms on markets. Journal of Financial Economics 93(1), 15-36.

[61] Hoppe, H. C., Lehmann-Grube, U., 2001. Second-mover advantages in dynamic quality competition. Journal of Economics and Management Strategy 10(3), 419-433.

[62] Horváthová, E., 2010. Does environmental performance affect financial performance? A meta-analysis. Ecological Economics 70(1), 52-59.

[63] Hull, C.E., Rothenberg, S., 2008. Firm performance: The interactions of corporate social performance with innovation and industry differentiation. Strategic Management Journal 29(7), 781-789.

[64] Ichniowski, C., Shaw, K., 2003. Beyond incentive pay: Insiderséstimates of the value of complementary human resource management practices. Journal of Economic Perspectives 17(1), 155-180.

[65] Iwata, H., Okada, K., 2010. How does environmental performance affect financial performance? Evidence from Japanese manufacturing firms. Ecological Economics 70(9), 1691-1700.

[66] Jo, H., Harjoto, M.A., 2011. Corporate governance and firm value: The impact of corporate social responsibility. Journal of Business Ethics 103(3), 351-383.

[67] Johnstone, N., Labonne, J., 2009. Why do manufacturing facilities introduce environmental management systems? Improving and/or signaling performance. Ecological Economics 6(8), 719-730.

[68] Jones, R., Murrell, A.J., 2001. Signaling positive corporate social performance: An event study of family-friendly firms. Business and Society 40(1), 59-78.

[69] Kim, E.-H., Lyon, T. P., 2008. Greenhouse gas reductions or greenwash? Working paper, University of Michigan.

[70] Kotler, P., Lee, N., 2005. Corporate social responsibility: Doing the most good for your company and your cause. Hoboken, NJ: Wiley.

[71] KPMG, 2011. KPMG international survey of corporate responsability reporting. Available at http://www.kpmg.com/PT/pt/IssuesAndInsights/Documents/corporate-responsibility2011.pdf.

[72] Lanfranchi, J., Pekovic, S., 2011. How green is my firm? Worker well-being and job involvement in environmentally-related certified firms. Working paper CEE (Center for Employement Studies).

[73] Lanoie, P., Laurent-Lucchetti, J., Johnstone, N., Ambec, S., 2011. Environmental policy, innovation and performance: New insights on the Porter hypothesis. Journal of Economics and Management Strategy 20(3), 803-841.

[74] Lee, M.-D.P., 2008. A review of the theories of corporate social responsibility: Its evolutionary path and the road ahead. International Journal of Management Reviews 10(1), 53-73.

[75] Loureiro, M.L., Lotade, J., 2005. Do fair trade and eco-labels in coffee wake up the consumer conscience?. Ecological Economics 53(1), 129-138.

[76] Lutz, S., Lyon, T.P., Maxwell, J.W., 2000. Quality leadership when regulatory standards are forthcoming. The Journal of Industrial Economics 48(3), 331-348.

[77] Lyon, T. P., Maxwell, J.W., 2008. Corporate social responsibility and the environment: A theoretical perspective. Review of Environmental Economics and Policy 1(0), 1-22.

[78] Margolis, J.D., Walsh, J., 2001. People and profits? The search for a link between a company's social and financial performance. Mahwah, NJ: Lawrence Erlbaum.

[79] Margolis J.D., Walsh., J., 2003. Misery loves companies: Rethinking social initiatives by business. Administrative Science Quarterly 48(2), 268-305.

[80] Margolis, J.D., Elfenbein, H., Walsh, J., 2009. Does it pay to be good... and does it matter? A meta-analysis and redirection of research on corporate social and financial performance. Working paper, Harvard University.

[81] Maxwell, J.W., Decker, C., 2006. Voluntary environmental investment and responsive regulation. Environmental and Resource Economics 33(4), 425-439.

[82] Maxwell, J.W., Lyon, T.P., Hackett, S.C., 2000. Self-regulation and social welfare: The political economy of corporate environmentalism. Journal of Law and Economics 43(2), 583-617.

[83] McWilliams, A., Siegel, D., 2000. Corporate social responsibility and financial performance: Correlation or misspecification? Strategic Management Journal 21(5), 603-609.

[84] McWilliams, A., Siegel, D., 2001. Corporate social responsibility: A theory of the Firm Perspective. Academy of Management Review 26(1) 117-127.

[85] MORI, 2000. European attitudes towards corporate social responsibility. Research for CSR Europe. London: MORI.

[86] Murphy M., Perrot F., Rivera-Santos M. (2012). New Perspectives on Learning and Innovation in Cross-Sector Collaborations. Journal of Business Research, forthcoming.

[87] Orlitzky, M., Schmidt, F.L., Rynes, S.L., 2003. Corporate social and financial performance: A meta-analysis. Organization Studies 24(3), 403-441.

[88] Porter, M., Van der Linde, C., 1995. Toward a new conception of the environment-competitiveness relationship. Journal of Economic Perspectives 9(4), 97-118.

[89] Portney, P.R., 2008. The (not so) new corporate social responsibility: An empirical perspective. Review of Environmental Economics and Policy 2(2), 261-275.

[90] Post, J.E., Preston, L.E., Sachs, S., 2002. Redefining the corporation: Stakeholder management and organizational wealth. Stanford, CA: Stanford University Press.

[91] Reinhardt, F.L., Stavins, R.N., Vietor, R.H.K., 2008. Corporate social responsibility through an economic lens. Review of Environmental Economics and Policy 2(2), 219-239.

[92] Reinhardt, F.L., Stavins, R.N., 2010. Corporate social responsibility, business strategy, and the environment. Oxford Review of Economic Policy 26(2), 164-181.

[93] Sam, A.G., Innes, R., 2008. Voluntary pollution reductions and the enforcement of environmental law: An empirical study of the 33/50 program. Journal of Law and Economics 51(2), 271-296.

[94] Scholtens, B., 2008. A note on the interaction between corporate social responsibility and financial performance. Ecological Economics 68(1-2), 46-55.

[95] Sen, S., Bhattacharya, C.B., 2001. Does doing good always lead to doing better? Consumer reactions to corporate social responsibility. Journal of Marketing Research 38(2), 225-243.

[96] Shleifer, A., 2004. Does competition destroy ethical behavior? American Economic Review 94(2), Papers and Proceedings of the One Hundred Sixteenth Annual Meeting of the American Economic Association San Diego, CA, January 3-5, 2004 (May, 2004), 414-418.

[97] Siegel, D., Vitaliano, D., 2007. An empirical analysis of the strategic use of corporate social responsibility. Journal of Economic Management and Strategy 16(3), 773-792.

[98] Sinclair-Desgagnï¿½, B., Gozlan, E., 2003. A theory of environmental risk disclosure. Journal of Environmental Economics and Management 45(2), 377-393.

[99] Sjöström, E., 2008. Shareholder activism for corporate social responsibility: What do we know? Sustainable Development 16(3), 141-154.

[100] Social Investment Forum (SIF), 2010. US SIF 2010 Annual Report. Social Investment Forum, Washington.

[101] Solow, R.M., 1987. We'd better watch out. New York Times Book Review. July 12, 36.

[102] Surroca, J., Tribo, J.A., Waddock, S., 2010. Corporate social responsibility and financial performance: The role of intangible resources. Strategic Management and Journal 31(5), 463-490.

[103] Takeda, F., Tomozawa, T., 2008. A change in market responses to the environmental management ranking in Japan. Ecological Economics 67(3), 465-472.

[104] Turban, D.B., Greening, D.W., 1997. Corporate social performance and organizational attractiveness to prospective employees. Academy of Management Journal 40(3), 658-672.

[105] Van Beurden, P., Gossling, T., 2008. The worth of values. A literature review on the relation between corporate social and financial performance. Journal of Business Ethics 82(2), 407-424.

[106] Van de Velde, E., Vermeir, W., Corten, F., 2005. Corporate social responsibility and financial performance. Corporate Governance 5(3), 129-138.

[107] Van den Berghe, L., Louche, C., 2005. The link between corporate governance and corporate social responsibility in insurance. Geneva Papers on Risk and Insurance, 30(3), 425-442.

[108] Wagner, M., 2008. Empirical influence of environmental management on innovation: Evidence from Europe. Ecological Economics 66(2-3), 392-402.

[109] Wagner, M., 2010. The role of corporate sustainability performance for economic performance: A firm-level analysis of moderation effects. Ecological Economics 69(7), 1553-1560.

[110] Walley, N., Whitehead, B., 1994. It's not easy being green. Harvard Business Review 72(3), 46-52.